

TEST COMPANY
TEST STREET
TEST CITY
TS 12345-6789

SAME

	100	31300	11/06/95	12/06/95
	BEST WAY	11/06/95	NET 30	TESTSALES
1 CT	00000300	HIGH ALTITUDE WATERMELON	1.01	1.01
1 PK	01100517	SPARTAN SEEDS	2.39	2.39
9 PK	04569870	NORTHERN LITE BLUE SPRUCE	858.32	7,724.88
12 BX	11005004	BUSH GREEN SEEDS	2.50	30.00
12 CT	11005011	LASSO RED SEEDS	892.23	10,706.76
26 PK	11005018	EARLY BANTAM SEEDS	.38	9.88
5 BX	11057893	AFRICAN DAISSY, SEEDS	2.35	11.75
1 PK	15975365	HEAVY OAK	129.09	129.09
33 BX	32746510	HOPS BREWING LIGHT	1.20	39.60
33 BX	32746510	HOPS BREWING LIGHT	1.20	39.60
6 EA	46578913	SEED SURVEYING SITE	50.00	300.00
2 BX	56413213	POT POT	7.65	15.30
80 PK	65412384	SEED SCRUBBER	888.79	71,103.20
1 PK	84512023	OREGON SPRING TOMATO SEED	.97	.97
2 DZ	96325874	PINEAPPLE-ORANGE SEEDS	1.29	2.58
11 BX	98412006	BLACK BEAUTY ZUCCHINI	2.30	25.30
5 EA	98546320	FROZEN JUICE PROCESSOR	109.90	549.50

Thank You
Because you have ordered
over \$500 of seeds this
year, on your next seed
order you will receive
a 10% discount.

\$90,691.81
\$90,691.81

12/06/95

Figure 1A An example of line data produced by an application program (Prior Art)


 Super Sun Seeds A Sunco Company		Order 12345-6789 Fax 123-456-7890	
TEST COMPANY TEST STREET TEST CITY TS 12345-6789			
Order 100 Product 31300 Date 11/06/95 Due 12/06/95		Order 12345-6789 Fax 123-456-7890	
Ship Via BEST WAY Ship Date: 11/06/95 Terms: NET 30 Subtotal: TESTSALES			
Qty	Unit	Description	Amount
1	CT	00000300 HIGH ALTITUDE WATERMELON	1.01
1	PK	01100517 SPARTAN SEEDS	2.39
9	PK	04569870 NORTHERN LITE BLUE SPRUCE	858.32
12	BX	11005004 BUSH GREEN SEEDS	2.50
12	CT	11005011 LASSO RED SEEDS	892.23
26	PK	11005018 EARLY BANTAM SEEDS	.38
5	BX	11057893 AFRICAN DAISSY, SEEDS	2.35
1	PK	15975365 HEAVY OAK	129.09
33	BX	32746510 HOPS BREWING LIGHT	1.20
33	BX	32746510 HOPS BREWING LIGHT	1.20
6	EA	46578913 SEED SURVEYING SITE	50.00
2	BX	56413213 POT POT	7.65
80	PK	65412384 SEED SCRUBBER	888.79
1	PK	84512023 OREGON SPRING TOMATO SEED	.97
2	DZ	96325874 PINEAPPLE-ORANGE SEEDS	1.29
11	BX	98412006 BLACK BEAUTY ZUCCHINI	2.30
5	EA	98546320 FROZEN JUICE PROCESSOR	109.90
Total Due			\$90,691.81
Return this invoice with your payment Payment due date: 12/06/95 Super Sun Seeds		Total Due \$90,691.81 Super Sun Seeds	
TEST COMPANY TEST STREET TEST CITY TS 12345-6789		TEST CITY TS 12345-6789	
Packing List		Customer Copy	
TEST CITY TS 12345-6789		TEST CITY TS 12345-6789	
Page 1		Page 1	
		File Copy	

Figure 1B An example of customer invoice produced using line data (prior art)

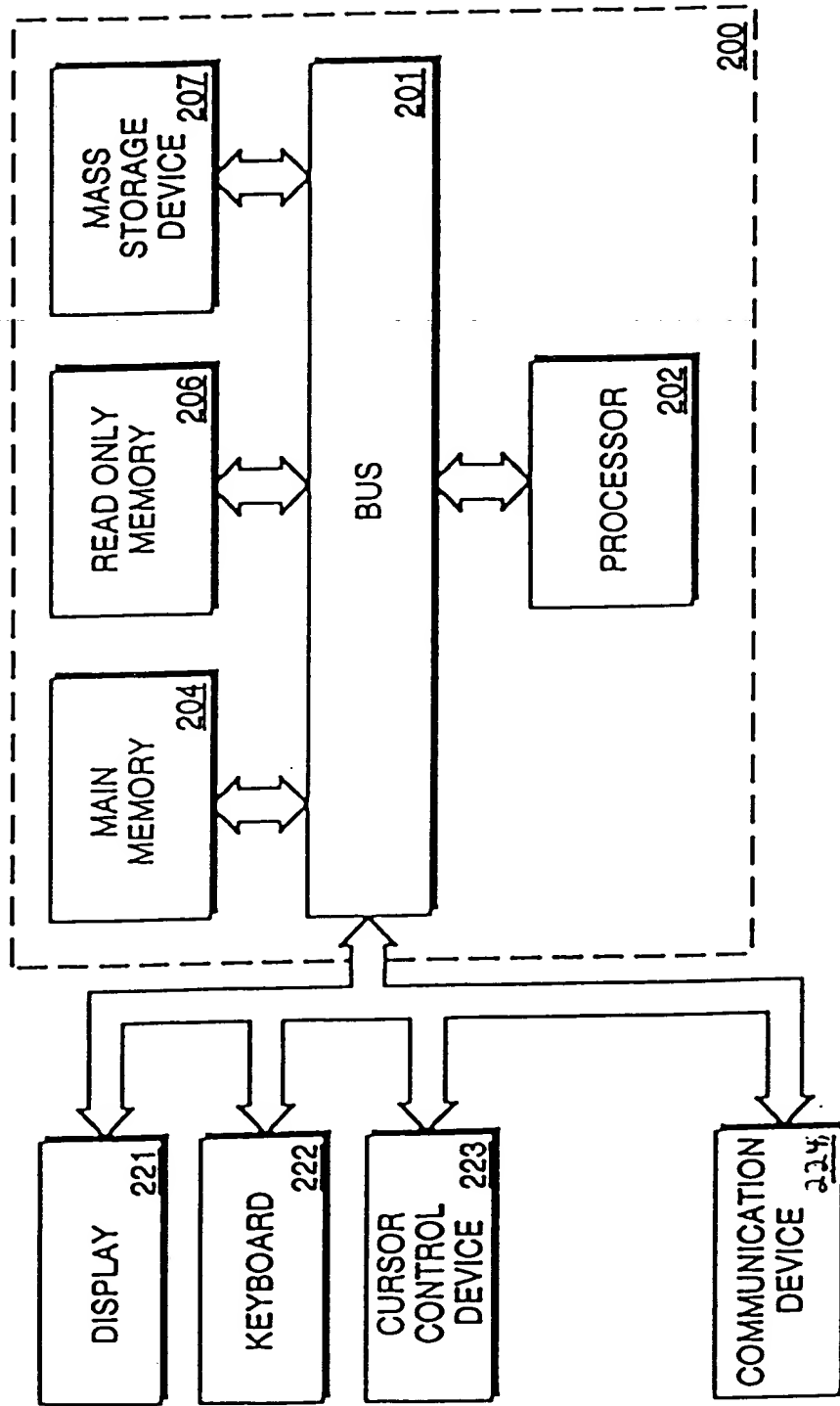


Fig. 2

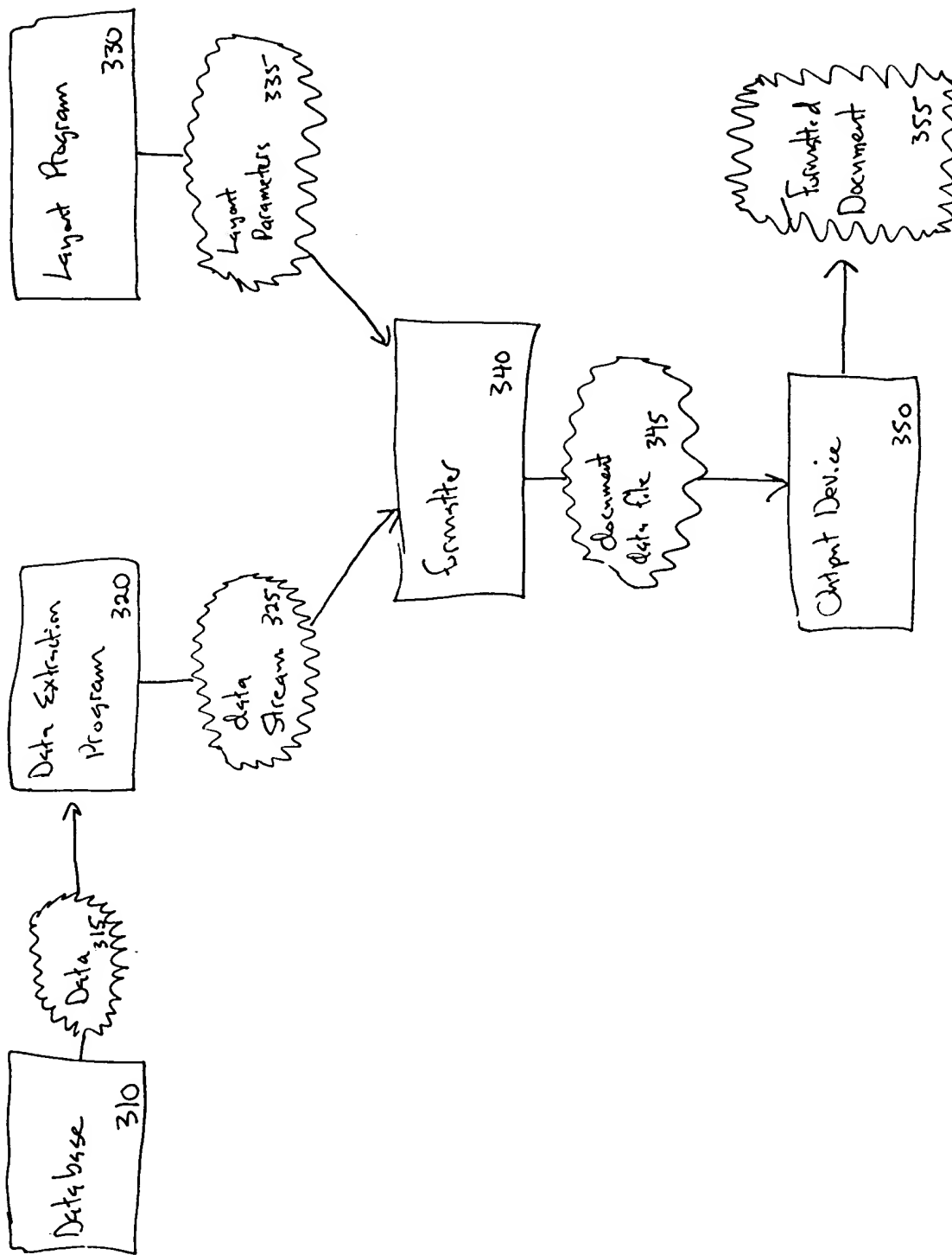


Figure 3

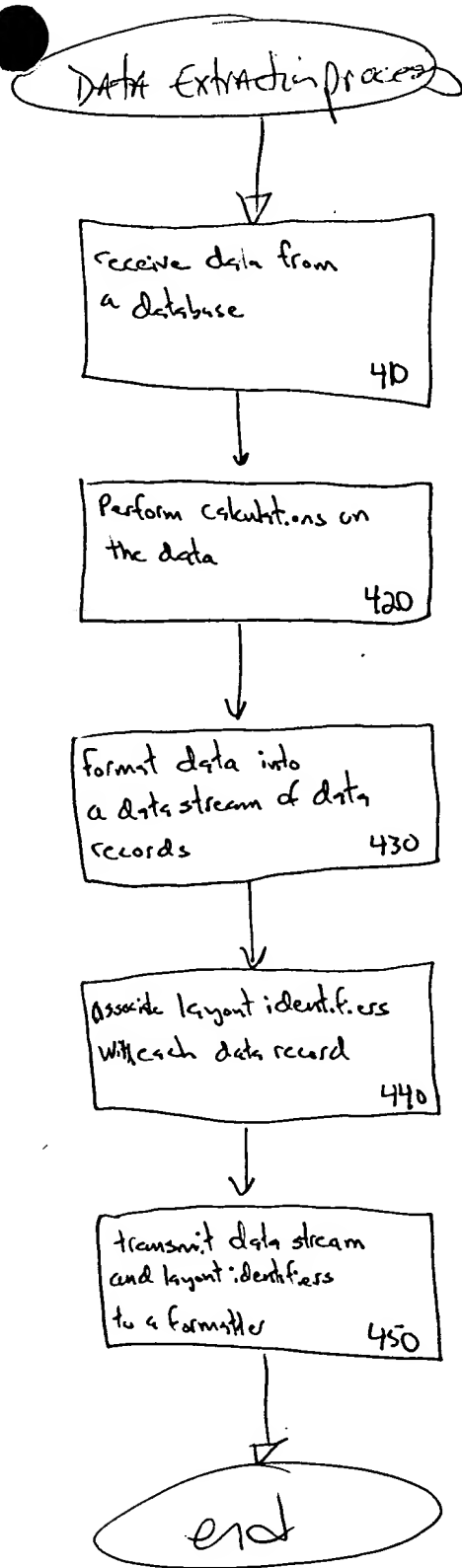


Figure 4 A Flow Diagram for an Exemplary Data Extraction Program

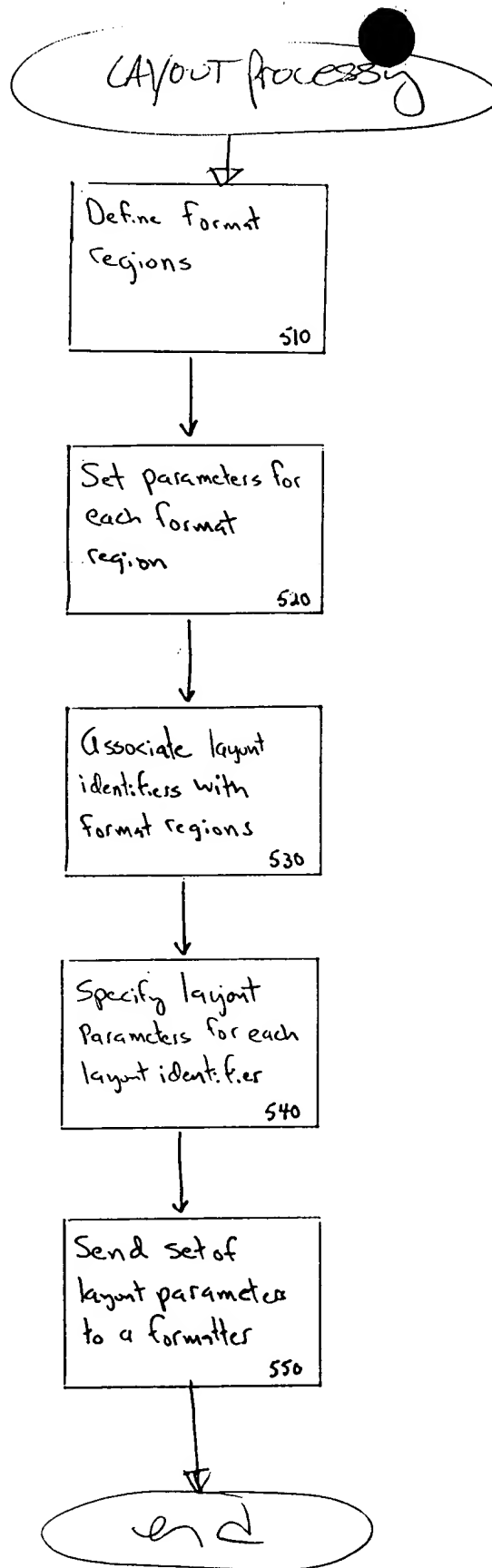


Figure 5 Flow Diagram for an Exemplary Layout Program

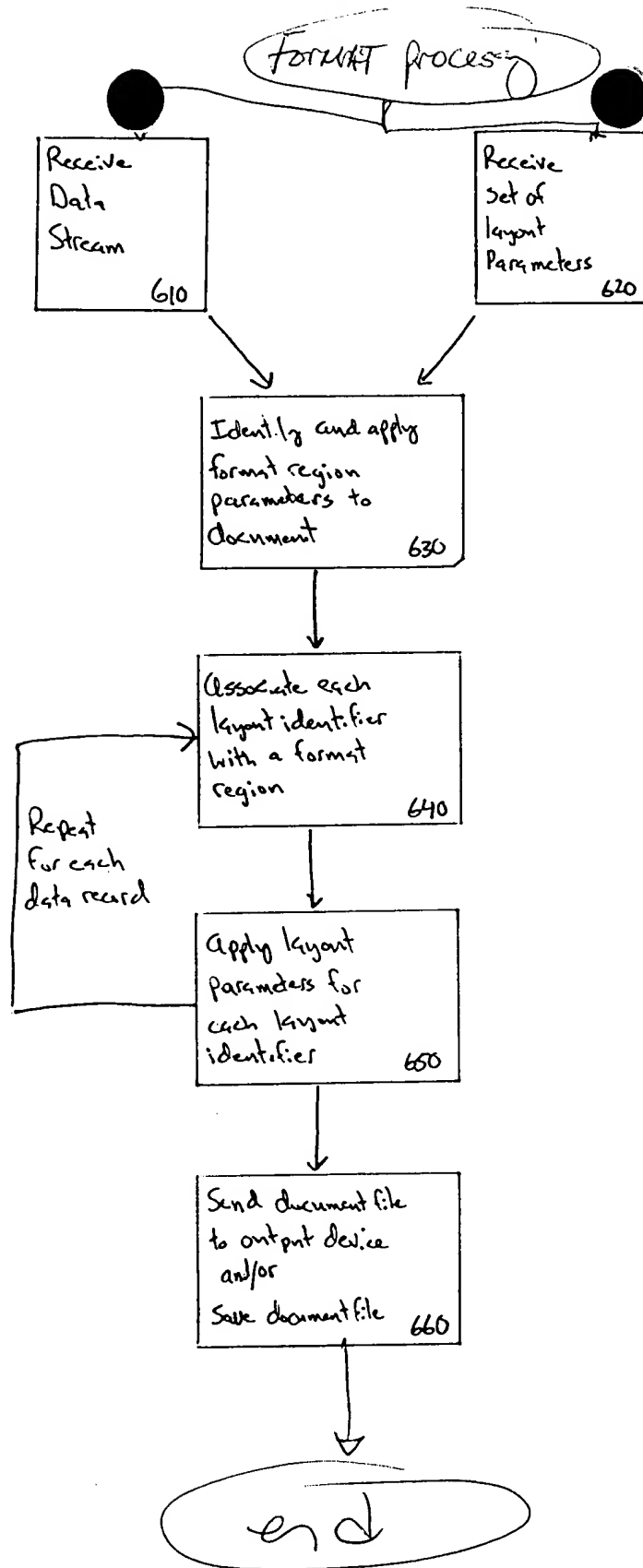


Figure 6 Flow Diagram for an Exemplary Formatter

700

1111111112222222233333333344444444555555556666666677777777778
1234567890123456789012345678901234567890123456789012345678901234567890

715

statmid	026-257311Chubby Checker 123 Redlight Lane Twistnshout MA 02345				
statsum	\$2591.24	\$1946.93	\$1956.43	\$0.00	\$2581.72
crheader					
crdata	DEPOSIT	01/05/90	\$	26.90	
crdata	AUTO DEPOSIT	01/15/90	\$	954.27	
crdata	AUTO DEPOSIT	01/30/90	\$	954.27	
crdata	INTEREST	01/31/90	\$	11.49	
crtotal	\$1946.93				
ckheader					
ckdata1	352	01/04/90	\$	321.50	
ckdata1	353	01/05/90	\$	100.00	
ckdata1	354	01/10/90	\$	122.30	
ckdata1	355	01/11/90	\$	59.95	
ckdata1	356	01/15/90	\$	852.33	
ckdata1	357	01/30/90	\$	500.35	
cktotal	\$1956.43				
balhead					
baldata1		01/04/90	\$	2269.74	
baldata1		01/05/90	\$	2196.64	
baldata1		01/10/90	\$	2074.34	
baldata1		01/11/90	\$	2014.39	
baldata1		01/15/90	\$	2116.33	
baldata1		01/30/90	\$	2570.25	
baltotal	\$2581.74				
statrail					

720

layout
identifiers

line data records 710

Figure 7 An example of a Data Stream of data records with layout identifiers for a bank statement

Big Brother Bank

"We watch over you"

P.O. Box 1573

Beantown, MA 02116

Account Number: 026-257311

Statement Begin Date: JAN 02, 1990

Statement End Date: FEB 01, 1990

Chubby Checker
123 Redlight Lane
Twistnshout, MA 02345

Super Checking Account Activity

810

Beginning Balance	Credits	Debits	Service Charge	Ending Balance
\$2591.24	\$1946.93	\$1956.43	\$0.00	\$2581.74

Credits	Description	Date	Amount
	DEPOSIT	01-05-90	\$ 26.90
	AUTO DEPOSIT	01-15-90	\$ 954.27
	AUTO DEPOSIT	01-30-90	\$ 954.27
	INTEREST	01-31-90	\$ 11.49
	Total Credits		\$1946.93

Checks	Check No.	Date	Amount	Check No.	Date	Amount
	352	01/04/90	\$ 321.50	355	01/11/90	\$ 59.95
	353	01/05/90	\$ 100.00	356	01/15/90	\$ 852.33
	354	01/10/90	\$ 122.30	357	01/30/90	\$ 500.35
	Total Checks		820			\$1956.43

Daily Balances	Date	Balance	Date	Balance
	01/04/90	\$2269.74	01/11/90	\$2014.39
	01/05/90	\$2196.64	01/15/90	\$2116.33
	01/10/90	\$2074.34	01/30/90	\$2570.25
	Final Balance			\$2581.74

Interest Rate As of 01-04 ... 5.321%

Page 1

Figure 8 An Example of a Bank Statement


```

.....
/* statsum BODY
.....
905 - LAYOUT statsum BODY ;
910 - FIELD TEXT C'Super Checking Account Activity'
      POSITION 0 in 2.0 in
      FONT super ; /* Static text - Super Checking */
      DRAWGRAPHIC LINE ACROSS 7.5 IN BOLD
      POSITION 0 .15 in
      repeat down 2 spaced 1 mm;
      FIELD TEXT C'Beginning Balance'
      POSITION .3 in 2.4 in
      FONT head ; /* Static text - first header */
      FIELD TEXT C'Credits'
      POSITION 2.4 in 2.4 in
      FONT head ; /* Static text - first header */
915 - FIELD TEXT C'Debits'
      POSITION 3.6 in 2.4 in
      FONT head ; /* Static text - first header */
      FIELD TEXT C'Service Charge'
      POSITION 4.8 in 2.4 in
      FONT head ; /* Static text - first header */
      FIELD TEXT C'Ending Balance'
      POSITION 6.3 in 2.4 in
      FONT head ; /* Static text - first header */
      FIELD START 11 LENGTH 8
      POSITION 1.4 in 2.6 in
      FONT varb ; /* Variable text - Beg balance */
      FIELD START 20 LENGTH 8
      POSITION 3.1 in 2.6 in
      FONT varb ; /* Variable text - Credits */
920 - FIELD START 30 LENGTH 8
      POSITION 4.4 in 2.6 in
      FONT varb ; /* Variable text - Debits */
      FIELD START 40 LENGTH 5
      POSITION 5.7 in 2.6 in
      FONT varb ; /* Variable text - Service Chrg */
      FIELD START 50 LENGTH 8
      POSITION 7.3 in 2.6 in
      FONT varb ; /* Variable text - End Balance */
925 - DRAWGRAPHIC LINE ACROSS 7.5 IN BOLD
      POSITION 0 .7 in;
.....

```

Figure 9

Layout Parameters for the
 <Statsum> layout identifier in the Bank
 Statement example

```

/*****
/** ckdata1 BODY left side          **/
/*****
1005  LAYOUT ckdata1 BODY GROUP;
1010  FIELD  START 12 LENGTH 3
      POSITION 1.4 in NEXT
      FONT  varb ; /* Variable text - Check number */
1015  FIELD  START 24 LENGTH 8
      POSITION 2.4 in CURRENT
      FONT  varb ; /* Variable text - Date          */
1020  FIELD  START 34 LENGTH 8 ALIGN RIGHT
      POSITION 4.2 in CURRENT
      FONT  varb ; /* Variable text - Amount        */
      *****/

```

Figure 10 layout parameters for the "ckdata1" layout identifier in the Bank Statement Example

1100

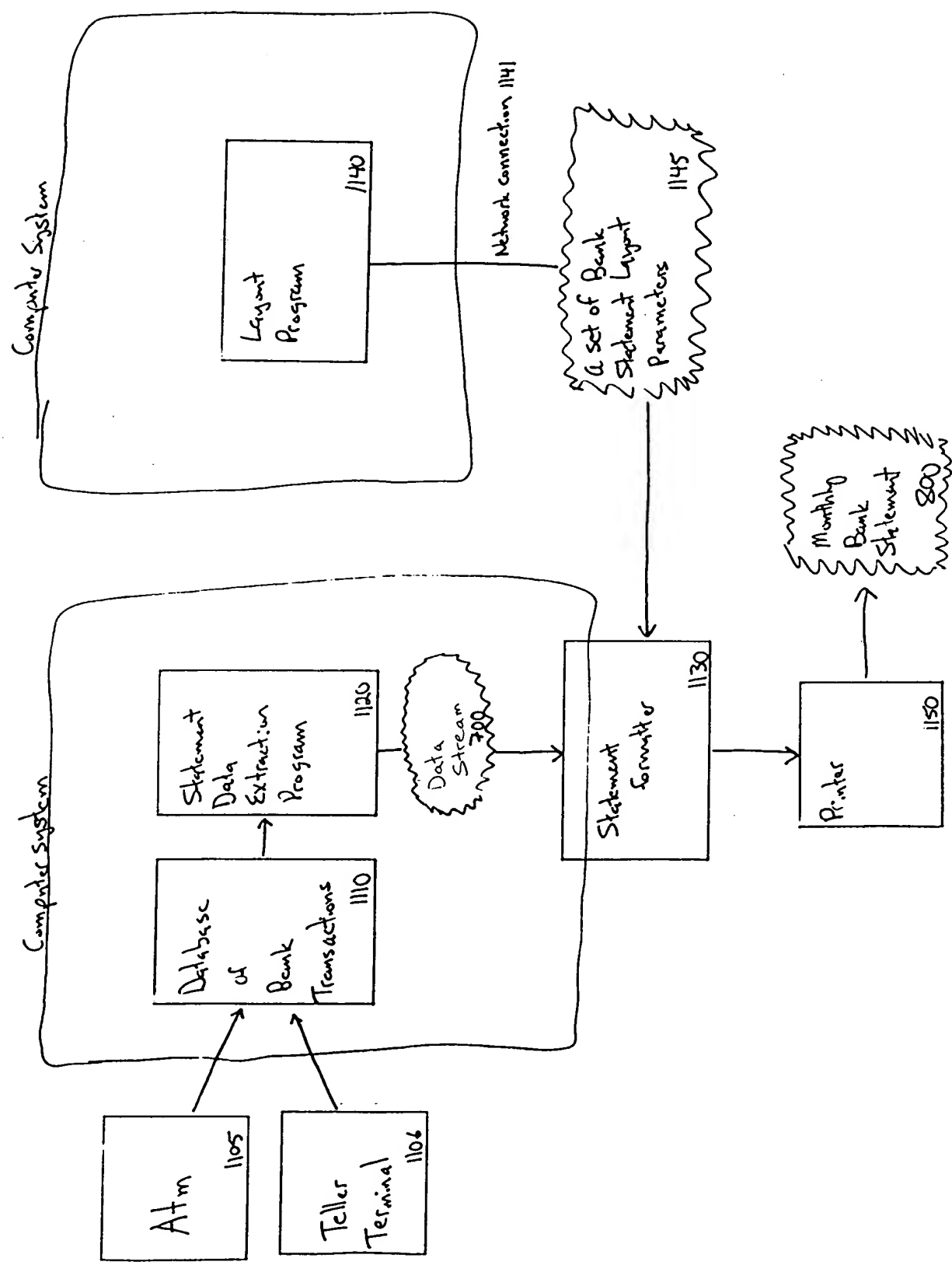


Figure 11